

WHAT IS CLAIMED IS:

1. A device for aerating water in a well comprising:

- a) a primary water pumping section for drawing water from the well;
- b) an aerating section operatively connected to the primary water

5 pumping section for drawing air into the well and subsequently injecting the air into the well water above the level of the primary water pumping section; and

- c) a motor operatively connected to the primary water pumping section and the aerating section for operating both sections simultaneously.

10 2. A device as recited in Claim 1, wherein the aerating section includes a compressor section located below the level of primary water pumping section.

3. A device as recited in Claim 2, wherein the compressor section is adapted and configured to draw air into the well through an air inlet tube.

15 4. A device as recited in Claim 2, wherein the compressor section is adapted and configured to discharge compressed air into the well water through an air discharge tube that has an outlet port located above the level of the primary water pumping section.

20 5. A device as recited in Claim 3, wherein a check valve is operatively associated with the air inlet tube.

6. A device as recited in Claim 1, wherein the aerating section includes a secondary water pumping section located below the level of the primary water pumping section.

5 7. A device as recited in Claim 6, wherein the aerating section further includes a venturi tube in communication with the secondary water pumping section.

8. A device as recited in Claim 7, wherein the venturi tube has a first inlet configured to communicate with the secondary water pumping section and a second inlet
10 configured to communicate with an air inlet tube.

9. A device as recited in Claim 7, wherein the venturi tube is adapted and configured to discharge aerated water into the well water through an air discharge tube having an outlet port located above the level of the primary water pumping section.
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10. A device as recited in Claim 8, wherein a check valve is operatively associated with the air inlet tube.

11. A device as recited in Claim 6, wherein the secondary water pumping
20 section has a first inlet communicating with an air inlet tube, and a second inlet located below the level of the water inlet of the primary water pumping section for drawing in well water.

12. A device as recited in Claim 11, wherein the secondary water pumping section is adapted and configured to discharge aerated water into the well water through a discharge tube having an outlet located above the level of the primary water pumping section.

13. A device as recited in Claim 11, wherein a check valve is operatively associated with the air inlet tube.

14. A device for aerating water in a well comprising:

- a) a water pumping section for drawing water from the well;
- b) a compressor section located below the level of the water pumping section for drawing air into the well and subsequently injecting the air into the well water above the level of the water pumping section; and
- c) a motor operatively connected to the water pumping section and the compressor section for operating both sections simultaneously.

15. A device as recited in Claim 14, wherein the compressor section is adapted and configured to draw air into the well through an air inlet tube.

16. A device as recited in Claim 14, wherein the compressor section is adapted and configured to discharge compressed air into the well water through an air discharge tube that has an outlet port located above the level of the primary water pumping section.

5 17. A device as recited in Claim 15, wherein a check valve is operatively associated with the air inlet tube.

18. A device for aerating water in a well comprising:

- a) a primary water pumping section for drawing water from the well;
- 10 b) a secondary water pumping section located below the level of the primary water pumping section for drawing air into the well and subsequently injecting the air into the well water above the level of the primary water pumping section; and
- c) a motor operatively connected to the primary water pumping section and the secondary water pumping section for operating both sections simultaneously.

15 19. A device as recited in Claim 18, wherein the secondary water pumping section communicates with a venturi tube.

20. A device as recited in Claim 19, wherein the venturi tube has a first inlet
20 configured to communicate with the secondary water pumping section and a second inlet configured to communicate with an air inlet tube.

21. A device as recited in Claim 20, wherein the venturi tube is adapted and configured to discharge aerated water into the well water through an air discharge tube having an outlet port located above the level of the primary water pumping section.

5 22. A device as recited in Claim 20, wherein a check valve is operatively associated with the air inlet tube.

23. A device as recited in Claim 18, wherein the secondary water pumping section has a first inlet communicating with an air inlet tube extending through the well cap, and a second inlet located below the level of the water inlet of the primary water
10 pumping section for drawing in well water.

24. A device as recited in Claim 23, wherein the secondary water pumping section is adapted and configured to discharge aerated water into the well water through a
15 discharge tube having an outlet located above the level of the primary water pumping section.

25. A device as recited in Claim 23, wherein a check valve is operatively associated with the air inlet tube.

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